Atty Dockct No.: 10407/476
Serial No. 09/746,854

AMENDMENTS TO THE CLAIMS

Claim amendments and status:

1.   (Previously Presented) A generic device controller unit system for facilitating interaction between a processor and any number of peripheral devices, the system comprising:

a general purpose device controller employing asynchronous true real time peripheral device control, wherein the device controller interfaces between a non-true real time operating system and the peripheral devices, thereby allowing a non-true real time operating system to implement true real time control of the peripheral devices; and

a data and protocol communications interface, wherein the communications interface connects the processor and the peripheral devices, thereby allowing the processor to utilize a single protocol and associated data to communicate with the peripheral devices which may be utilizing protocols and associated data which are different than that used by the processor.

2.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control while interfaced with a non-true real time operating system running standard non-true real time software.

3.   (Original)   The system of Claim 1, wherein the generic device controller unit system functions as a distributed processing environment.

4.   (Original)   The system of Claim 1, wherein the generic device controller unit system further includes customized system drivers.

5.   (Original)   The system of Claim 1, wherein Universal Serial Bus is the default communication protocol between the generic device controller unit system and the processor.

6.   (Original)   The system of Claim 2, wherein the generic device controller unit system interfaces with the non-true real time operating system that functions in a Win32 environment.

2

Atty Docket No.: 10407/476
Serial No. 09/746,854

7.   (Original)   The system of Claim 1, wherein the generic device controller unit system is an input/output device interface for a processor to peripheral devices.

8.   (Original)   The system of Claim 1, wherein the generic device controller unit system provides real time device control to resource management capabilities of a standard non-true real time operating system.

9.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control without the higher level functionality of the processor.

10.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control without the processor using a true real time kernel.

11.   (Original)   The system of Claim 1, wherein the generic device controller unit system produces true real time peripheral device control without the processor utilizing a layered true real time operating system.

12.   (Previously Presented) A generic device controller unit system for facilitating interaction between a processor and any number of peripheral devices, the system comprising:

a general purpose device controller employing asynchronous true real time peripheral device control, wherein the device controller allows a non-true real time operating system to interface with various non-specific peripheral devices, thereby allowing a non-true real time operating system to implement true real time control of peripheral devices without a processor requiring either a real time kernel or a layered true real time operating system.

13.   (Original)   The system of Claim 12, wherein the generic device controller unit system produces true real time peripheral device control while interfaced with a non-true real time operating system running standard non-true real time software.

3

Atty Docket No.: 10407/476
Serial No. 09/746,854

14.   (Original)   The system of Claim 12, wherein the generic device controller unit
system functions as a distributed processing environment.

15.   (Original)   The system of Claim 12, wherein the generic device controller unit
system is an input/output device interface for the processor to the peripheral devices.

16.   (Original)   The system of Claim 12, wherein the generic device controller unit
system provides real time device control to resource management capabilities of a standard non-true
real time operating system.

17.   (Original)   The system of Claim 12, wherein the generic device controller unit
system produces true real time peripheral device control without the higher level functionality of the
processor.

18.   (Original)   The system of Claim 12, wherein the generic device controller unit
system interfaces with the non-true real time operating system that functions in a Win32
environment.

19.   (Previously Presented) A generic device controller unit system for providing a data
and protocol communications interface which facilitates interaction between a processor and any
number of peripheral devices, the system comprising:

an asynchronous general device data and protocol communications interface, wherein the
communications interface connects a processor and various peripheral devices, thereby allowing the
processor to utilize a single protocol and associated data to communicate with the various peripheral
devices which may utilize different protocols and associated data than that used by the processor.

20.   (Original)   The system of Claim 19, wherein the generic device controller unit
system functions as a distributed processing environment.

21.   (Original)   The system of Claim 19, wherein Universal Serial Bus is the default
communication protocol used between the generic device controller unit system and the processor.

4

Atty Docket No.: 10407/476
Serial No. 09/746,854

22.   (Original)   The system of Claim 19, wherein the generic device controller unit system is an input/output device interface for the processor to the peripheral devices.

23.   (Original)   The system of Claim 19, wherein the generic device controller unit system produces protocol and associated data translation without the higher level functionality of the processor.

24.   (Previously Presented) A method for providing a data and protocol communications interface to facilitate interaction between a processor and any number of peripheral devices, the method comprising:

interfacing between a non-true real time operating system and various non-specific peripheral devices;

employing asynchronous true real time peripheral device control through a generic device controller unit, wherein the device controller allows the processor to implement true real time control of the peripheral devices without the non-true real time operating system requiring either a real time kernel or a layered true real time operating system; and

providing a protocol and associated data communications interface between the processor and the peripheral devices, thereby allowing the processor to utilize a single protocol and associated data to communicate with the peripheral devices which may utilize different protocols and associated data than that used by the processor.

25.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control while interfaced with a non-true real time operating system running standard non-true real time software.

26.   (Original)   The method of Claim 24, wherein the generic device controller unit functions as a distributed processing environment.

5

Atty Docket No.: 10407/476
Serial No. 09/746,854

27.   (Original)   The method of Claim 24, wherein the generic device controller unit further includes customized system drivers.

28.   (Original)   The method of Claim 24, wherein Universal Serial Bus is the default communication protocol between the generic device controller unit and a processor.

29.   (Original)   The method of Claim 24, wherein the generic device controller unit interfaces with a non-true real time operating system that functions in a Win32 environment.

30.   (Original)   The method of Claim 24, further comprising:

providing an input/output device interface from the processor to the peripheral devices.

31.   (Original)   The method of Claim 24, further comprising:

providing real time device control to resource management capabilities of a standard non-true real time operating system.

32.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control without the higher level functionality of the processor.

33.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control without the processor utilizing a true real time kernel.

34.   (Original)   The method of Claim 24, further comprising:

producing true real time peripheral device control without the non-true real time operating system being a layered true real time operating system.

6